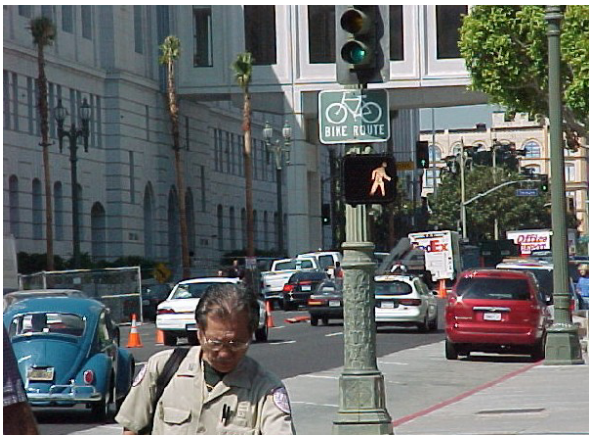
Chapter 5. Streets and Parking

"In the contemporary metropolis, development must adequately accommodate automobiles. It should do so in ways that respect the pedestrian and the form of public space ."

Congress for the New Urbanism, "Charter of the New Urbanism", McGraw-Hill, New York 2000

Lighting at Whisman Station in Mountain View



Street near Union Station in Los Angeles

Automobiles within the TOD

Automobile Access

{[12] "Transit station communities should be developed recognizing that many trips even within the station area will still be made using cars. To that end, the street system within the station area is very important and needs to be designed to accommodate the conflicting demands of auto and pedestrian travel. The traditional grid pattern with interconnected streets and small blocks provides the greatest level of accessibility within station areas and to the rest of the community. A grid (or other dense network of interconnected streets) has the shortest trip lengths, greatest choice of routes, and is easiest to expand. In contrast, typical suburban street systems create large blocks with wide arterial spacing and few local street connections. These areas often lack direct routes between station areas and adjacent neighborhoods. Research has demonstrated that grid network designs can result in more direct routing of vehicles than suburban street networks. Comparisons of activity areas with similar land uses have shown that vehicle miles traveled can be reduced by between 10 to 40 percent where streets are interconnected along a system of small blocks." [12]}

Parking Design

Parking Management

{[13] "Managing the growth of surface parking represents a major challenge to TOD. Typical suburban development projects devote 50 to 75% of their sites to surface parking. The result is land use densities that are too low to serve frequent and fast regional transit service. A more limited parking supply encourages residents, employees, and shoppers to use transit.

Surface lots separate buildings from public streets, making it difficult for pedestrians to walk between buildings and to transit facilities. Parking management provides alternative strategies to traditional surface parking and can result in more compact developments. If properly designed and located, auto parking can be provided to meet demand and not negatively impact the pedestrian environment." [13]}

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Parking Reduction for TOD

TOD offers significant opportunities to reduce the number of parking spaces below conventional parking requirements typical for retail, office and residential land uses. TOD provides these opportunities by increasing transit accessibility and combining a mixture of land uses. The design and location of TODs can enable a reduction in the number of parking spaces needed.

Research indicates TOD offers the potential to reduce parking per household on the order of approximately 20%, as compared to non transit-oriented land uses. A wide range of parking reductions has also been found for commercial parking in TODs. However, to date there are no clear conclusions regarding how much parking may reasonably be reduced for any particular TOD. Therefore, parking need calculations must be made on a site-by-site basis.

Terry Parker and GB Arrington, "Statewide Transit-Oriented Development Study: Factors for Success in California", for the California Department of Transportation, Final Report, April 2002

Surface parking next to Downtown Plaza in Sacramento

Control the Total Supply of Parking

{[14] "Too much parking in a station area discourages TOD by discouraging pedestrians, since parking lots are an unpleasant pedestrian environment and make distances between uses inconveniently great. Large parking lots also thwart TOD by consuming land that might otherwise be developed with uses that could attract new transit riders. Finally, abundant, free parking makes driving too convenient, which is a disincentive for people to use transit. Controlling the parking supply is an excellent way to shift people to other modes of travel including transit." [14]}

Reduce the Impact of Parking

{[15] "The single most effective way of reducing the impact of large areas devoted to parking is to build parking structures. Property values, proximity to riders, and existing development character all play a role in the viability of structured park-and-ride facilities. When planning park-and-ride facilities, create an environment that encourages walking." [15]}

Retail establishments on the ground floor of a parking structure in Sacramento

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Encourage Ground Floor Development in Parking Structures

{[16] "Design parking lots and structures so they do not dominate the frontage of pedestrian-oriented streets or establish impediments to pedestrian routes. Retail or other land uses should be located on the ground floor and incorporated into the building's design. Portions of parking structures that do not have first level retail uses should be designed to have an appearance that blends with neighboring structures." [16]}

Surface Parking

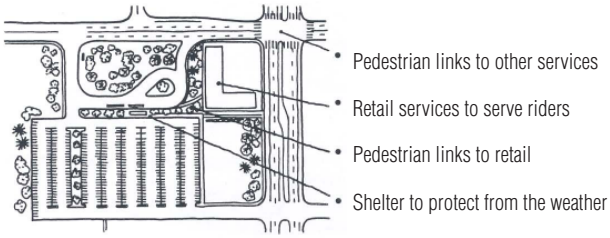
{[17] "Streetside parking is critical to keeping the focus of a community on the street, rather than on the interior of lots. Parallel parking helps to create street activity, as well as provide functional spaces. It supports orienting building entries to the street by providing convenient access for guests and patrons.

Parking lots should not dominate the frontage of pedestrian-oriented streets or interrupt pedestrian routes. Parking lots should be located behind buildings or in the interior of a block, whenever possible. In no case shall surface parking lots occupy more than 33 percent of the frontage of a pedestrian-oriented street." [17]}

Parsons Brinckerhoff

Park & Ride Lot with Buses

- {[18] "Where parking is or can be located at the side or rear of buildings, attractive, public pedestrian connections to the primary street should be created. Signs should be posted to direct drivers to parking entrances that may not be obvious.
- Encourage commercial district people and employees to use transit or limit employee parking to remote spaces, freeing the most desirable spaces for customers.
- Consolidate parking in public or private shared lots. Where shared parking is desirable, consideration should be given to time-share possibilities. Merchants are encouraged to share parking with other users that need parking primarily during hours when stores are closed, e.g., a movie theatre or church." [18]}



Park & Ride: Denver Regional Transit District

Park-and-Ride

{[19] "Park-and-ride lots may be a desirable interim use of land along older commercial streets near outlying transit stations where newly concentrated commercial uses near the station lie between the transit rider and parking. Such lots may also provide shared parking opportunities for nearby residents that drive to other areas to work but could use the lot after hours." [19]}

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2 Ibid.

3 Ibid.

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13 Ibid.

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